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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
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09/987,376

11/14/2001

William D. Wilber

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7590

01/26/2005

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EXAMINER

JONES, STEPHEN E

ART UNIT

PAPER NUMBER

2817

DATE MAILED: 01/26/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

# Office Action Summary

Application No.

09/987,376

Applicant(s)

WILBER ET AL.

Examiner

Stephen E. Jones

Art Unit

2817

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

## Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

## Status

- 1) ☒ Responsive to communication(s) filed on 27 October 2004.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

## Disposition of Claims

- 4) ☒ Claim(s) 64-80 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 64-80 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

## Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

## Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some \* c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

## Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftperson's Patent Drawing Review (PTO-948)
- 3) ☐ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)  
Paper No(s)/Mail Date \_\_\_\_\_
- 4) ☐ Interview Summary (PTO-413)  
Paper No(s)/Mail Date. \_\_\_\_\_
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other: \_\_\_\_\_

## **DETAILED ACTION**

### ***Continued Examination Under 37 CFR 1.114***

1. A request for continued examination under 37 CFR 1.114, including the fee set forth in 37 CFR 1.17(e), was filed in this application after final rejection. Since this application is eligible for continued examination under 37 CFR 1.114, and the fee set forth in 37 CFR 1.17(e) has been timely paid, the finality of the previous Office action has been withdrawn pursuant to 37 CFR 1.114. Applicant's submission filed on 10/27/04 has been entered.

### ***Claim Objections***

2. Claims 71 and 79 are objected to because of the following informalities:

Regarding Claim 71, It appears that the phrase "wherein in an effected area of conductive plating is one of removing the conductive plating and indenting the conductive plating" would be more clear if it read as --wherein the effected area of conductive plating is one of removed conductive plating and indented conductive plating" to improve the grammatical form.

Regarding Claim 79 (line 2), it appears that the phrase "the block" should read as --a block-- since the block has not been previously recited.

Appropriate correction is required.

### ***Claim Rejections - 35 USC § 102***

3. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

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(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

4. Claims 79-80 are rejected under 35 U.S.C. 102(b) as being anticipated by Blum et al.

Blum et al teaches removed rectangular slot portions (e.g. 72b) of the outer conductor of a block resonate filter. Inherently the device would function equivalently to the present claims, especially since it is the same structure as the presently claimed structure.

### ***Claim Rejections - 35 USC § 103***

5. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

6. This application currently names joint inventors. In considering patentability of the claims under 35 U.S.C. 103(a), the examiner presumes that the subject matter of the various claims was commonly owned at the time any inventions covered therein were made absent any evidence to the contrary. Applicant is advised of the obligation under 37 CFR 1.56 to point out the inventor and invention dates of each claim that was not commonly owned at the time a later invention was made in order for the examiner to

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consider the applicability of 35 U.S.C. 103(c) and potential 35 U.S.C. 102(e), (f) or (g) prior art under 35 U.S.C. 103(a).

7. Claims 64-66, 68-75, and 77-78 are rejected under 35 U.S.C. 103(a) as being unpatentable over Ishitobi (JP 09148810) in view of Blum et al.

Ishitobi teaches a dielectric block triple mode resonator including a shielding on the outer surface (e.g. see the translation section 10).

However, Ishitobi does not explicitly teach a tuning element such as a slot or rectangle void or decreased thickness in the outer conductor that is selected to increase or decrease a resonant frequency (Claims 64-66, 68-75, and 77-78).

Blum teaches removed rectangular slot portions (e.g. 72b) of the outer conductor of a block resonator filter.

It would have been considered obvious to one of ordinary skill in the art to have modified the Ishitobi resonator to have included rectangular slots (i.e. reduced thickness since the material is removed) such as taught by Blum, because it would have provided the advantageous benefit of tuning to decrease the resonant frequency (see Blum Col. 6, lines 50-55), thereby suggesting the obviousness of such a modification. Also, since the combination results in the same structure as the present claims, as an obvious consequence it would function in the same manner.

8. Claims 67 and 76 are rejected under 35 U.S.C. 103(a) as being unpatentable over Ishitobi (JP 09148810) and Blum et al. as applied to claims 64-65 and 73 above, and further in view of Matsumoto et al. (US 2001/0028287).

The combination of Ishitobi and Blum teaches a dielectric block triple mode resonator including a shielding on the outer surface (e.g. see the translation section 10) having a removed portion for tuning.

However, the combination does not explicitly teach that the tuning element has a circular pattern.

Matsumoto et al. provides the exemplary teaching of providing circular removed portions in the metallization of a dielectric resonator (e.g. see Fig. 4).

It would have been considered obvious to one of ordinary skill in the art to have substituted circular removed portions such as taught by Matsumoto in place of the rectangular portions in the combination of Ishitobi and Blum, because it would have been considered a mere optimization of the tuning characteristics using well-known geometric tuning shapes while providing the advantageous benefit of increasing the resonant frequency (e.g. see Matsumoto Section 95), thereby suggesting the obviousness of such a modification.

### ***Response to Arguments***

9. Applicant's arguments with respect to claims 64-80 have been considered but are moot in view of the new ground(s) of rejection.

### ***Conclusion***

10. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure.

Hiroyuki (JP 406177607A) teaches a dielectric filter including various tuning shapes (e.g. see Fig. 6).

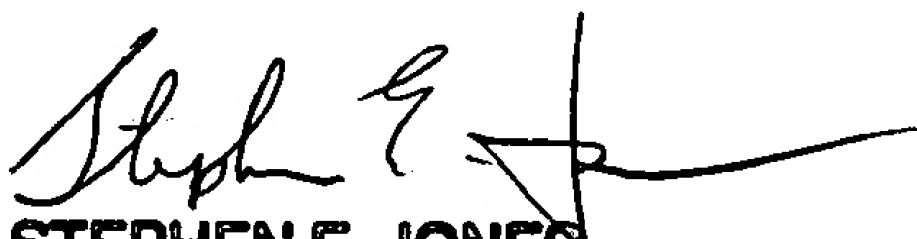
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Kneisel et al. teaches removing round portions of an outer conductor for tuning.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Stephen E. Jones whose telephone number is 571-272-1762. The examiner can normally be reached on Monday through Friday from 8 AM to 4 PM.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Robert J. Pascal can be reached on 571-272-1769. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

  
**STEPHEN E. JONES**  
**PRIMARY EXAMINER**

SEJ